ATTACHMENT A

SEP Proposal

Overview:

The Rancho Murieta Community Service District (RMCSD) and the Fishery Foundation of California (FFC) have agreed to develop a monitoring plan and to provide a full year of Chinook salmon monitoring on the Cosumnes River. The monitoring will consist of two phases: 1. Upstream adult passage and spawning distribution (Fall, 2007). 2. Spawning production and juvenile out migration (Spring, 2008). Monitoring will focus on the historic spawning reach from Dillard Road to Latrobe Falls. The proposed monitoring is an essential component for future watershed planning and targeted restoration. Additionally, the project will provide essential, basic life history data which is crucial for the management of Chinook salmon on the Cosumnes River.

Project:

The FFC will develop a monitoring plan for the Chinook salmon of the Cosumnes River. Monitoring goals will include documenting run timing and abundance, mapping spawning distribution, and estimating juvenile production via out migration surveys. The monitoring will consist of three tasks:

Task 1 - Project Management

Project management encompasses all QAQC activities, database management, quarterly and final reporting, and all necessary costs directly associated with specific project oversight. It also allows for in the field for inspection of work in progress and training purposes.

Task 2 - Escapement

Total escapement and will be estimated using the standard Peterson Index (Lincoln Index) as employed by Snider and Reavis (2000):

N=MC/R
Where,
N = estimated spawning population,
M = number of carcasses marked during the survey,
C = total number of carcasses examined during the survey, and
R = number of marked carcasses recovered during the survey.

Or

Bailey's Modification, N=M(C+1)/(R+1) allows for multiple recaptures of marked fish. Escapement will also be estimated by expanding total redd counts by a factor of 2.5.

Task 3 – Outmigration

The FFC will operate a screw trap at river mile 6.7 to estimate outmigration timing and production relative to total escapement. As juvenile salmon migrate downstream, they will be intercepted at five foot rotary screw trap. The number of juvenile outmigrants will be estimated by using a trap efficiency method of releasing marked fish upstream of the trap. Fish will be

marked with Bismark Brown dye prior to being released 1 mile upstream of the trap. Trap efficiency tests will be conducted when numbers captured merit the effort (>100). Trap efficiency will be estimated using a modification to the Petersen estimate from the equation e = (R+1)/(M+1), where e is the estimated trap efficiency, M is the number of marked fish released upstream of the trap, and R is the number of marked fish recaptured. Specific performance measures will be juvenile abundance relative to total escapement and outmigration timing.

As proposed, the above work is consistent with and supports the objectives of the Comprehensive Assessment and Monitoring Program (CAMP) established by Section 3406(b)(16) of the CVPIA (CAMP, 2004). The proposed work is fully supported by the USFWS and CDFG for the Cosumnes River.

Cost:

The RMCSD shall contribute $100,000 towards the development and implementation of the proposed monitoring program.

Implementation:

Upon approval, the FFC will begin development of the monitoring plan. Upstream migration surveys will begin in October 2007 through January 2008. Outmigration surveys will begin in March 2008 and continue through late May or early June of 2008. A final report will be delivered to RMCSD no later than August 31, 2008.

Deliverable:

Within 30 days of issuance of the ACL Order~~August 1, 2007~~. Provide a copy of the partnership agreement.

September 30, 2007. Provide a copy of the monitoring plan.

August 31, 2008. Provide a final report on the findings in scientific format.

Each calendar quarter beginning August 1, 2007 and ending August 31, 2008 provide a report on the status of the project including all invoices paid to the consultant working on the project.